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INDO-EUROPEAN *I* AND *E* IN GERMANIC

During the first half of the nineteenth century comparative philology was dominated, as is well known, by the belief in the primitive character of the Sanskrit, and especially of the Sanskrit vowels. As this language exhibited only the simple vowels *a*, *i*, *u*, these were assumed to be original, and the *e* and *o* of the European languages to be derived from them. Since now the Gothic vowel system agreed remarkably with the Sanskrit, it was but natural to assume that it also represented the original state of affairs. In fact, Grimm saw in this agreement of the Gothic with the Sanskrit the strongest possible proof of the original character of the latter.¹ Under such a belief, it is clear that the only way to account for *e* and *o* of the West and North Germanic was to explain them, as Grimm did as breakings of *i* and *u*.

Gradually, however, doubts as to the secondary character of *e* and *o* began to multiply. Curtius struck the first blow at this theory in his famous article *Über die Spaltung des A-Lautes im Griechischen und Lateinischen* and finally, under the repeated assaults of Amelung, Collitz, and Joh. Schmidt, the whole structure of comparative philology, based as it was upon Sanskrit, fell with a crash, and philologists were forced to erect on new foundations a new structure from the ruins of the old. As Collitz clearly showed,² the original Indo-European vowels must be considered identical with those of the Greco-European, as he put it, and not with the Sanskrit. With the old structure there fell also the belief in the primitive character of the Gothic. Germanic philology had likewise to be revised; and when the smoke of battle had cleared away, it was seen that W. Germ. had forged to the front, while Gothic had been relegated to second place. It was now only natural to assume, for example, that the *e* of Lat. *edere* had

¹ In his *Geschichte der deutschen Sprache*, p. 274, Grimm says: "Es ist ein gewaltiger Satz, den uns Sanskrit und gotische Sprache zur Schau tragen, dass es ursprünglich nur drei kurze Vokale gibt, *a*, *i*, *u*."

² *Bezz. Beiträge*, Vol. II, p. 303, and Vol. III, pp. 177 ff.

been retained in ON *eta*, OE, OS *etan*, OHG *ezzan*, and that the *i* of Goth. *itan* was a secondary development.

The only disturbing element was the fact that the parallelism between *i* and *u* had been broken up. Under the old theory both were considered original, as we have seen, and both were similarly broken, the one to *e*, the other to *o*. According to the new view, however, *u* still retained its old position, because, Indo-Eur. *o* having become *a* in Germanic, Prim. Germ. could not have had a short *o*. *U* was therefore still considered original, while W. Germ. *o* had still to be explained as a breaking of *u*. With *e* it was different, for it was shown in the majority of cases to be a survival of Indo-Eur. *e*, and not a breaking. There were, to be sure, some few instances where Indo-Eur. *i* had clearly been broken to *e* in W. Germ., but the old parallelism between *i* and *u* was evidently a thing of the past.

Now, it is possible that some of the older philologists may have had at times the desire to restore this parallelism, and to reinstate Gothic once more in its old supremacy; but the matter seemed impossible of accomplishment. Suddenly, however, Professor Collitz appeared at the Philologian Congress held at St. Louis during the Louisiana Purchase Exposition, and, in Vol. XX, pp. 65 ff., of the *Modern Language Notes*, with a theory which aims at just this restoration. In his article he takes the ground that Indo-Eur. accented *e* becomes *i* in Prim. Germ., irrespective of the vowels which follow, and that then this *i* is later broken to *e* before *a*, *o*, *e* in N. and W. Germ., but remains unaltered in Gothic.¹ This is virtually a return to the position of Jacob Grimm, as far as Gothic is concerned, and is all the stranger when one remembers that Professor Collitz was one of the first to abandon Grimm's position.² The matter is now, however, no longer as simple as at the time of Grimm, who, under the belief in the originality of the Sanskrit vowels, merely had to assume the retention

¹ Except, of course, when broken before *r*, *h*, *hv*.

² In his article, *Bezz. Beiträge*, Vol. III, p. 177, he clearly sides with Müllenhoff against Grimm, stating that one of the supports of Grimm's theory had been withdrawn, since Müllenhoff had recognized that the three-vowel system of the Gothic goes back to a general Germanic five-vowel system, as Gothic *i* and *u* do not represent the earlier stages of the *e* and *o* of the other Germanic dialects.

of original *i* in Gothic. Under the present views, Professor Collitz is forced to assume a two-fold change. For the sake of clearness, let us state the case concretely. To explain the difference between OHG *ezzan* and *izzit*, or between OHG *wint* (Lat. *ventus*) and *zehan* (Lat. *decem*), we must assume either one of two things. Either Indo-Eur. *e* has remained *e* in Germanic in accented syllables except before nasal + cons., or when followed by *i* or *j*, or we must assume, with Professor Collitz, that Indo-Eur. *e* became *i* in all cases in Prim. Germ., and was then broken to *e* before guttural vowels.

Now, it is a generally accepted rule of science that of two possible theories one should accept the simpler, other things of course being equal. Applying this principle to the case in hand, it would seem more natural, providing we knew nothing of the merits of the case, to suppose that Indo-Eur. *e* remained in Germanic except in certain specific cases, than to assume that it first changed to *i* and then in a vast majority of instances back again to *e*.¹ But let us admit, for the sake of argument, that the change which Professor Collitz assumes did really take place. Then the question naturally arises: When did it occur? At the time of Tacitus the original *e* is still retained, as such names as *Segimērus*, *Segimundus*, *Hermiones*, *Fenni*, and *Venedt*, over against OHG *Sigimar*, *Sigimund*, *Irmin-sūl*, *Winida*, go to prove.² This is the only possible interpretation; for, as the words have *i* in the second syllable, they could not be considered cases of breaking. Professor Collitz' twofold change must therefore have taken place later than the first century, A. D.

Now, by the side of these words with *e* there are to be found others with *i* before a nasal + cons.; *e. g.*, *Ingvaeones* and *Inguimērus*. How would Professor Collitz explain the existence of the two vowels side by side, if Indo-Eur. *e* becomes *i* in all cases? The only natural explanation is that the change of *e* to *i* had already taken place before nasal + cons. in the first

¹ For example, in the verbs of the third ablaut class whose stems end in a liquid + cons. there are but four forms where *i* appears, namely in the three persons of the present sing. ind. and the sing. imp., whereas in all other present forms of the verb, the infinitive, the plural ind., and the whole of the subj. *e* is found.

² Cf. Bremer, *Zeitschrift für deutsche Philologie*, Vol. XXII, p. 251.

century, but not before double nasals or other consonants. All the evidence gathered goes to show that the change from Indo-Eur. *e* to *i* did not take place in Prim. Germ., as his theory would require, but that it was a separate dialectical development, and a late one at that. In continental German it seems to have taken place by the second century before double nasals, if stress can be laid on the spelling *Φίννοι* in Ptolemy, and by the fourth century before other consonants when followed by an *i*, as the form *Sigismundus* of Ammianus Marcellinus would indicate. In N. Ger. the change appears to be much later, as the Finnish loan word *rengas* ("ring"), borrowed from the Norse and the Icelandic genitive *Venþa*,¹ would go to prove. Before other consonants the change does not seem to have occurred in ON before 600, as the Runic form *erilaR* ("earl") found in the inscriptions of Kragehul, Lindholm, and Varnum, etc., would seem to indicate.² In fact, Kock goes so far as to consider that the change had not taken place in some parts before the ninth century, basing his belief on the Celtic loan-word *erell*, which appears in the Irish annals of 847, and which is the borrowing of the above-mentioned *erilaR*.

The change of *e* to *i* in the combination *eu* was also very late. That it was unchanged in Prim. Germ. is shown by such words as *Teutomêrus* and the Finnish *keula* (ON *kióll*). In Runic inscriptions we still have *eu* in *leubaR* ("dear"), *leub-wini*, etc. Further, in OE *treu-lēsnis* "perfidia," of the *Epinal Glossary*, and in OS *treulos* and *treuhaft*.³ How could Professor Collitz account, according to his theory, for the existence of *e* at so late a date? It is certainly not a breaking of *i* to *e*, for *u* never produces that result. It can only be explained as a retention of original *e*, which is, however, directly opposed to Professor Collitz' theory. Similarly, how shall we explain the occurrence of *e* before *u* of the following syllable in many words? In OE and ON we have in all such cases a breaking, which, however, goes back to an *e*.⁴ In OS the cases with *e* far outnumber those with *i*.⁵ Only in

¹ Cf. Kock, *Beiträge*, Vol. XXVII, p. 169.

² Cf. Bugge, *Arkiv for norsk Filologi*, N. F., Vol. IV, p. 9.

³ Other examples, Streitberg, *op. cit.* § 62.

⁴ E. g., OE *feolu*, *teoru*, *felu*, *heoru*, etc.; ON *fiol*, *hiqrr*, *miolk*, etc.

⁵ Cf. Holthausen, *Altsächsisches Elementarbuch*, § 52.

OHG does *i* appear to any great extent before *u*, and even here the cases are very evenly divided.¹ What possible explanation could Professor Collitz offer here? He could not assume that *u* had caused the breaking, for the numerous preterite plurals of the first ablaut class disprove this,² and we are accustomed to believe that *u* causes the retention of an original *i*. To my mind, we have here a clear tendency of continental German (i. e., OHG and OS) to change *e* to *i* before following *u*—a tendency, however, which was not consistently carried out, and which did not exist at all in OE and ON.³

Professor Collitz is forced to the assumption that Indo-Eur. *e* became *i* in Germanic in all positions, because he accepts Holtzmann's law that *i* and *u* are broken to *u* and *o* before *a*, *e* and *o*. This law still finds general acceptance for *u*, because it is so consistently carried out in the ablaut verbs in the second and third classes. But even here ON exhibits a few exceptions in the second class, e. g., the perfect participles *budinn* and *hlutenn* by the side of the regular *boðenn* and *hlotenn*.⁴ In the case of nouns the usage in the different Germanic dialects is very much divided with the exception of OHG.⁵ For OE Sievers⁶ points out the fact that when *u* is found a labial of some sort is present, and the same would apply to most of the OS examples. Might not the instances with *u* be considered as a survival of the original vowel, which the labials by their related character helped to retain, as is still the case in English *pull*, *bush* etc?

If, now, the breaking of *u* to *o* admits of numerous exceptions, that of *i* to *e* exhibits so many instances of nonconformity that one may reasonably doubt whether it really exists at all. Heinzel⁷

¹ Cf. Braune, *Althochdeutsche Grammatik*, § 30c.

² E. g., ON *bitom*, OE *biton*, OS *bitum*, OHG *bizzum*, where *i* appears without exception.

³ The cases in the 1st sing. pres. ind. of the strong verbs in ON are explained by Noreen as due to analogy.

⁴ Noreen, *Altisländische Grammatik* § 412, an. 2.

⁵ Cf. OE *fugol*, OS *fugol*, and even OHG *fugal*, by the side of the more usual *formfogal*, or OE *bucca*, ON *bukkr*, by the side of OHG *boc*, ON *bokkr*. In OE the exceptions are especially frequent. In addition to those already mentioned we find: *full*, *wulf*, *wulle*, *fugol*, *bucca*, *cnucian*, *uflan*, *ufor*, *ufera*, *lufu*, *lufian*, *spura* (beside *spora*) *spurnan*, (beside *spornan*) *mur-nan*, *murcnian*, *furdor*, *furdum*. Similarly in OS: *ful*, *wulf*, *smultro* (OE *smolt*), *turf*, *hurst* (NHG *Horst*), *spurnan*, *fugal*, *juk*, *kluftok* (NHG *Knoblauch*), *uppa* (Holthausen, loc. cit., § 88).

⁶ *Altenglische Grammatik*, § 55.

⁷ *Geschichte der neufränkischen Geschäftssprache*, p. 46.

believed that original *i* remained in OHG in accented syllables, while acknowledging the existence of a number of exceptions, a list of which he gives. Paul¹ was of the opinion that *i* remained in Prim. Germ., but was changed in OHG at times to *e* before *a*, *e*, *o*. Braune² denies the existence of the breaking as a law, stating that Germ. *i* remains as a rule in OHG even before following *a*, *e*, *o*. Wilmanns³ likewise is inclined to doubt whether the law exists at all. Of late, however, there has been a tendency to refer the breaking back to an earlier period. Streitberg⁴ states that before \bar{a} , \bar{o} , \bar{ae} of the following syllable *i* is broken to *e* in Prim. Germ., if *j* or nasal + cons. do not intervene, and thinks that the original state of affairs was disturbed by numerous cases of analogy. Brugmann, who in the first edition of his *Grundriss* had denied its existence for Prim. Germ., now follows Streitberg, but is less positive, stating that if it is a mechanical sound-change, it probably belongs to Prim. Germ.⁵ The reason of this change of view is due to the few cases in which general Germ. *e* undoubtedly corresponds to Indo-Eur. *i*; e. g.: OE, OS, OHG *wer*, OA *verr*, over against Lat. *vir*; OE, OHG, MLG *nest*, but Lat. *nīdus* < **nizdos*; ON *hegre*, MLG *heger*, OHG *hehera* (NHG *Häher*), but Skr. *kikiś*, Grk. *κίσσα*.⁶ These instances appearing in every dialect, the conclusion was natural that the change of *i* to *e* was general Germanic. This is undoubtedly true for the words in question, but are we justified in connecting this breaking with the one observed in OHG? Kluge is the only one, as far as I know, to attempt to formulate any more detailed theory for this change, which he acknowledges to be rare.⁷ The truth of the matter is that we do not know the conditions under which the change takes place, as Kluge himself confesses. The

¹ *Beiträge*, Vol. VI, p. 82.

² *Althochdeutsche Grammatik*, § 31.

³ *Deutsche Grammatik*, § 181.

⁴ *Urgermanische Grammatik*, § 68.

⁵ Cf. *Grundriss*, Vol. I, § 35, and Vol. I², § 86.

⁶ A full list is given by Noreen, *Abriss der urgermanischen Lautlehre*, p. 20.

⁷ In Paul's *Grundriss*, Vol. I², p. 410, he considers it to be the rule before *r*, as in OE, OS, OHG, *wer*, ON *verr*, Lat. *vir*; before *h*, as in OE *twoho*, OHG *zweho*; and before *s*, as in OE, OHG *nest*. Before other consonants the dialects differ; thus, OE *higora* by the side of ON *hegre*, etc., given above, and ON *stege*, OHG *stega*, *steg*, but ON *stige* and *stigr*.

instances before *r* and *h* would seem to indicate that it is not dependent on the following vowel, but on the consonant, and might be considered parallel to the Gothic breakings. The other cases are too few in number, and the evidence too contrary, to make it safe to state the rule for Prim. Germ. as positively as Streitberg does. As to analogy, it is just as reasonable to suppose that it caused the change of *i* to *e* in other cases than before *h* and *r*, as to believe, with Brugmann, that later analogies interfered with the working of the law.

The exceptions to the law are very numerous and of great weight. Especially is this true of the many verbs of the first ablaut class. Phonetic laws, if they work at all, are found to be carried out most consistently in the case of the strong verbs. The strongest proof for the breaking of *u* to *o* is drawn from the perfect participles of the second and third classes. In the case of *i*, however, this is just where the rule breaks down. Over against the great number of participles of the first class in all dialects with *i* before the *a* of the ending, we have but one solitary instance of conformity to the law, namely ON *beðenn*, ppl. of *bida*. In my opinion, the older views were correct, and the breaking of *i* to *e* before *a*, *e*, and *o* exists as a tendency in the main only in OHG. Most of the examples generally adduced in support of the law are taken from this dialect. Here, indeed, we find many doublets, such as *scif*—*scef*; *scirm*—*scerm*; *ledic*—*lidic*, and many cases of *e* where other languages have *i*.¹ In loan-words the usage is divided in OHG, as Wilmanns points out.² Furthermore, if the breaking of *i* to *e* is so general a rule as many would have us believe, and as Professor Collitz evidently assumes, how can we explain the persistence of Indo-Eur. *i* in such words as OE, OHG *fisk*, ON *fiskr*, OS *fisc* (stem *fisko*—) or in OHG *wisa*, *snita*, *wizzōd*, and *hlinen*? Since the stems of all these words end in one of the above mentioned vowels, we should expect the *i* to be broken to *e*, as no hindering consonant intervenes. Is it reasonable to believe in a rule where the testimony is so divided, and

¹ E. g., *queck*, but OE *cwic*: *zebar*, but OE *tifer*: *lebara*, but OE *lifer*. See list in Braune, *op. cit.*, § 31, an. 1, and Wilmanns, *op. cit.*, § 181.

² E. g. *tih̄tōn* (Lat. *dictare*), *tisc*. (Lat. *discus*), *phistor* (Lat. *pistor*), with *i*, but *bech* (Lat. *pix*), *peffar* (Lat. *pip̄r*), with *e*, and *missa* by the side of *missa* (Lat. *missa*).

the exceptions more numerous than the instances adduced in its support?

If, however, we write our *non liquet* above it and discard the rule, we shall have no difficulty in explaining the vowels of the past participles of the ablaut verbs. In the case of the verbs of the first class,¹ we simply have to assume that the original *i* has been retained even before the *a* of the ending, and we meet with no difficulty. All the evidence is of the same kind and without exception, apart from the isolated Norse form *bedenn* mentioned above. Similarly, in the fifth class² we need merely to suppose that the Indo-Eur. *e* has remained, and again the matter is simple, the evidence all in harmony, and we are obliged to resort to no complicated system to explain the *e* of the root.

Let us see, however, what difficulties Professor Collitz has created for himself by considering the Gothic vowels to be original, and by accepting Holtzmann's rule of breaking. In order to explain the vowel of OHG *gigeban*, he has to assume a double change, first of *e* to *i* in accordance with Gothic *gibans*, and then a subsequent breaking in W. and N. Germ. back to the original *e*. But this rule, which works well for verbs of the fifth class, does not hold good for those of the first; for here we find, e. g., OHG *gibizzan* instead of *gibezzan*, which the rule would lead us to expect. To meet this difficulty, Professor Collitz creates a new law, and states that the breaking in the past participles is dependent upon that of the present stem. The verbs of the first class having an *i* in the present, which is not subject to breaking, therefore the vowel of the past participle likewise remains unbroken. This rule seems at first sight to be very satisfactory, for it accounts not only for the verbs of the first class, but also for those of the second and third classes, as Professor Collitz' examples show. In OHG it also accounts for those of the fourth class, but does not explain the forms of *neman* in the other dialects. In OE, to be sure, where *i* and *u* appear regularly before simple nasals, we have correctly enough inf. *niman*, participle *numen*. In OS, however, where the most usual form for

¹ E. g., OHG *gizigan* and *gibizzan*.

² E. g., OHG *gigeban*, *gibetan*.

the present is *nīman*,¹ the past participle exhibits most frequently the vowel *o*, rarely *u*,² which is directly opposed to Professor Collitz' rule of the dependence of the participle on the present stem. Similarly, in ON, although we have the infinitive *nema*, we find the form *numenn* to be more frequent in the participle than *nomenn*, which the rule of breaking would lead us to expect.³

There is, however, a much more serious class of exceptions to Professor Collitz' rule, and one which suggested itself to his mind; namely, the so-called *j*-presents of the fifth class,⁴ whose past participles exhibit the vowel *e*, and not that of the present stem, contrary to his rule of dependence. Professor Collitz very cleverly met and avoided this difficulty by changing his rule to read, that when the preterit plural and the past participle had one and the same breakable vowel in Prim. Germ., the breaking only occurs in the past participle when the vowel of the present stem is broken; otherwise it remains unbroken through the influence of the vowel of the preterit plural. This sur le certainly ingenious, but is so complicated that it is pot eno suspicion. Moreover, it is wholly empirical. We are not told why the influence should be so strong in certain cases and not in others. If, as Professor Collitz assumes, the *e* of the present stem exercises such an influence over the vowel of the past participle in the first, second, and third classes, in spite of the vowel of the preterit plural, which by its resemblance would naturally tend to keep the vowel unchanged, then why should not the umlauted vowel *i* of the *j*-presents exert a still more powerful influence over the vowel of the past participle, when the form of the preterit plural is so different as not to be a disturbing factor? In other words, if *u* is broken to *o* in OHG *giworfan*, in dependence upon the *e* of *werfan*, in spite of the *u* of the preterit

¹ *Nēman* occurs sporadically in the MSS M, C, P of the *Heliand*, and in the *Essen Glosses*; see Holthausen, *op. cit.* § 83.

² Holthausen, *op. cit.*, § 438 an.

³ Also in the Norse verbs *suimma*, where *i* appears regularly before the double nasal, Noreen considers the original form of the past participle to have been **somenn*, and only later to have changed by analogy to *sumenn* (*Altisländische Grammatik*, § 423, an. 2). Here the form of the vowel is evidently controlled by the double or single nasal, and not by the breaking or non-breaking of the vowel of the present stem.

⁴ Such as OHG *bitten*, *sitzen*, etc.

wurfum, why should not the *i* of *bitten* cause the past participle to appear as *gibitan*, notwithstanding the *a* of the ending, when the preterit *bātum* is so different in form that it cannot possibly be a disturbing factor? These complicated rules, however, are not necessary, as we have seen, if we are willing to assume the secondary character of the Gothic vowels.

In conclusion, I fail to see that we have to resort to complicated theories to explain the vocalism of Gothic under the generally accepted view, as Professor Collitz charges. Gothic has a strong predilection for close, or narrow, vowels. All the changes it makes are in this direction. Not only in the case of *i* and *u* does it show such preference, but also in the change of Germ. *ê* to *e*, the close character of which is abundantly proved by the frequent substitution of *ei* for *e*. Similarly, we find *û* often written for *ô*.¹ This tendency is characteristic, not only of Bible Gothic, but of all the Gothic dialects, as the instances collected by Wrede for East Gothic and Vandalian² and the Crimean Gothic forms *mīna* (= Bible Goth. *mēna*, OHG *māno*) and *schlīpan* (= Bible Goth. *slēpan*, OS *slāpan*) all go to show. The only exceptions to this tendency are the well known breakings before *h*, *hv*, and *r*, which are confessedly secondary. In my opinion, the attempt of Professor Collitz to derive the West and North Germanic vowels from the Gothic requires the assistance of a much more ingenious and complicated rule than any now in use to explain the secondary character of the Gothic.

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¹ Cf. Braune, *Gotische Grammatik*, § 7a, an. 2; § 12, an. 1; Wrede, *Gotische Grammatik*, § 12; Hirt, *Beiträge*, Vol. XXI, p. 122.

² *Quellen und Forschungen*, Vol. LIX, p. 91, and Vol. LXVIII, pp. 58 and 161.